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TITLE : METHOD FOR SELECTIVELY FORM DIAMOND

ABSTRACT : PURPOSE: To provide a method for selectively forming diamond by which diamond suitable for use in a high performance semiconductor device, a field emitter array, an optical waveguide, etc., can easily be formed in an arbitrary size and shape by simple operation.

CONSTITUTION: A pattern is formed on the surface of a substrate with a pattern forming material which is etched at a lower rate than the material of the substrate and has a higher m.p. than the temp. at which diamond is synthesized. Scribing and etching are carried out and then diamond is patternwise formed by vapor phase synthesis.

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